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Saving Cajun country:

NASA satellite data helps preservation efforts in Louisiana

NASA scientists at Stennis Space Center are using satellites to study the Louisiana wetlands, which are disappearing because of erosion, sinking land and rising sea levels. The wetlands are shrinking at the speed of 65 to 91 square km (25 to 35 square miles) each year.

Much of the Louisiana wetlands, where blue-crab fisher Michael Comardelle has lived all his life, are gone. With the wetlands goes the homeland of Comardelle's Cajun culture, as well as the buried relics of the Native American cultures that came before it.

"That was our playground," Comardelle said. "The swamp and the bayou were right at our doorstep. All that's eroding away so quick, so fast, it disappears in front of your eye, just about."

Human alteration of the flow of the Mississippi River is the primary culprit. Flood-control levees along its banks prevent the river from spilling out into the surrounding wetlands. Normally, the sediment from the river would build up the wetlands and help counter the erosion process, but without this influx of sediment, erosion goes unchecked.

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Crowds witnessed the powerful shake, rattle and roar under near-perfect skies at America's largest rocket propulsion test facility. Stennis performed a 520-second demonstrated reliability test for the Block II Space Shuttle Main Engine on the A-1 test stand Friday, Nov. 8.

More than 5,000 attend public engine test

Under clear night skies, more than 5,000 visitors attended the demonstrated reliability test for the Block II Space Shuttle Main Engine (SSME) at Stennis Space Center on Friday, Nov. 8.

"This was an excellent opportunity to share the excitement of a Space Shuttle Main Engine test with others," said NASA's Robert Lightfoot, director, Propulsion Test Directorate at Stennis.

The event drew visitors curious to see an engine test first-hand.

Tracy Smith of Pass Christian and his family came to Stennis to watch the test, their first since they moved near the center a decade ago.

"We've felt it and heard it since we moved in

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RS-83 preburner installed

Test series scheduled to begin

NASA engineers and technicians installed the Boeing Rocketdyne RS-83 preburner on the E-1 test stand at Stennis Space Center on Oct. 24 in preparation for a 15-test series on the first large-scale component of Boeing Rocketdyne's new RS-83 engine system.

"We are scheduled to begin testing in the near future," said NASA's Dave Liberto, RS-83 project manager at Stennis. "This near-full-scale preburner compo-

nent is designed to develop approximately 65,000 pounds of thrust."

The E-1 Cell-1 Test Facility was modified with new propellant delivery systems and associated structural modifications to support the new engine.

The RS-83 engine is a fuel-rich staged combustion, liquid hydrogen/liquid oxygen reusable

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Technicians work to install Boeing Rocketdyne's new RS-83 preburner on the E-1 Cell-1 test stand at Stennis Space Center.

From the desk of Bill Parsons Stennis Space Center Director



It is amazing how quickly time goes by. I cannot believe that it is now November. It feels like yesterday that I assumed my current responsibilities.

First, as we enter the holiday season, I would like to remind everyone of how important it is to keep safety foremost in your thoughts. We will all be traveling more, entertaining more and eventually putting up decorations that have not been used in quite some time. Please take extra care while you are here at work, as well as at home.

I would also like to remind everyone that although this is supposed to be an uplifting time of the year, many people struggle during the holiday season. Lend support to your family, friends and co-workers to make this time the best it can be.

The reorganization has been announced, and we are all working to implement the changes. For many of you, there are very few changes. A few of you have been asked to take on different and/or additional responsibilities. I realize that change can be difficult, but I also believe the true character of an individual can be determined by how that person deals with changes. I believe the character of the Stennis Space Center employees to be strong and resilient, and I thank each of you for your support and effort.

It will take all of us working as a team to achieve our goals.

NASA begins implementation of IFMP nucleus — the Core Financial Module

NASA's new financial management system took a huge step in late October when Marshall Space Flight Center, the Glenn Research Center and Headquarters' Chief Financial Office implemented the most recent element of the Integrated Financial Management Program (IFMP), the Core Financial Module.

The Core Financial Module, the biggest and most complex part of the entire system, is considered the IFMP nucleus.

"This is a momentous achievement given the complexity of the undertaking and the significant differences in our existing legacy systems and processes," said NASA's

Patrick Ciganer, IFMP Officer at Headquarters.

"Everyone involved in the process should be very proud. It is not often that a project of this magnitude comes to fruition on schedule."

Stennis is scheduled to have the Core Financial Module up and running before next summer.

IFMP is one of the key initiatives outlined by NASA Administrator Sean O'Keefe.

According to Ciganer, the program,

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Stennis Space Center conducted its site-wide annual Safety Day for employees Oct. 23. Participating in activities were, from left, NASA's Mike Smiles, manager, Office of Safety and Mission Assurance; Steve Williams, keynote speaker and president of Accelerated Development Systems Inc., Houston; and Stennis Space Center Director Bill Parsons.

NEWSCLIPS

The International Space Station turns two:

The world's first international orbital outpost celebrated its second anniversary of continuous residency and permanent human presence in space Nov. 2. In the past 12 months, 33 people have visited or lived aboard the orbiting complex. A total of 112 visitors have been aboard the station since it was launched, including men and women from six nations. The first crew members docked with the station to begin its permanent occupancy on Nov. 2, 2000. Five three-person crews have lived aboard for durations ranging from four to more than six months. In its second year of occupancy, astronauts and cosmonauts have conducted 16 spacewalks for maintenance and assembly of the station.

NASA to implement Integrated Space Transportation Plan:

President George W. Bush submitted an amendment to his fiscal year 2003 budget requesting accelerate implementation of a new Integrated Space Transportation Plan (ISTP) for NASA. Driven by the Agency's new vision and mission, the administration released details of a new, coordinated shift in three of the Agency's important space flight programs. The new plan makes investments to extend the shuttle's operational life for continued safe operations. The Orbital Space Plane is designed to provide a crew transfer capability to ensure access to and from the space station. The Next Generation Launch Technology Program funds developments in areas such as propulsion, structures and operations for the next-generation Reusable Launch Vehicle (RLV). The Space Launch Initiative (SLI) will focus on the Orbital Space Plane and Next Generation Launch Technology, including third generation RLV efforts. The budget changes reflect a strategic decision to more tightly couple the ISS, Space Shuttle and SLI programs.

NASA to join international ozone study:

NASA researchers will join scientists from the United States, the European Union, Canada, Iceland, Japan, Norway, Poland, Russia and Switzerland this winter to measure ozone and other atmospheric gases using aircraft, large and small balloons, ground-based instruments and satellites. This second SAGE III Ozone Loss and Validation Experiment (SOLVE II) campaign will be conducted in close collaboration with the European Commission, sponsored by the VINTERSOL (Validation of International Satellites and Study of Ozone Loss) campaign. (SAGE III stands for the third Stratospheric Aerosol and Gas Experiment.) SOLVE will take place in Kiruna, Sweden, the site of the first international effort during the winter of 1999-2000. SOLVE II is sponsored by NASA's Earth Science Enterprise, dedicated to better understanding and protecting our home planet.



International Space Station Status Report



A photograph taken Oct. 30 from the International Space Station of Mt. Etna's eruption in Italy.

During their tour of duty, the International Space Station Expedition Five crew has enjoyed a unique perspective of some remarkable activity on Earth. On Oct. 30, 2002, the crew observed Mount Etna's spectacular eruption and photographed the details of the eruption plume and smoke from fires triggered by the lava as it flowed down the 3,350-meter (11,000-foot) mountain in Sicily, Italy.

The International Space Station celebrated its second anniversary of continuous residency on Nov. 2. "Our success in the past two years has been phenomenal. We are blazing a trail in space and on Earth, through research and international cooperation, which can improve lives and expand exploration. We have many challenges ahead, but this team's continued hard work and dedication will build a final facility that eclipses even today's station," said NASA's Bill Gerstenmaier, International Space Station program manager.

During the two-year period since Expedition One Commander Bill Shepherd, Pilot Yuri Gidzenko and Flight Engineer Sergei Krikalev arrived at the station in 2000, its size has increased more than 90,718 kilograms (200,000 pounds). Sixty-five U.S. science investigations have been launched aboard the orbital outpost.



NASA astronaut Scott Altman, center, speaks with students from Copiah Academy following a presentation he made in the StenniSphere auditorium Nov. 14. Altman, a veteran of three space flights, has logged over 38 days in space. He was the pilot on STS-90 and STS-106 and was the mission commander on STS-109. Students, from left, include Alec Donahoe, Steven Bozeman, Shaun Pillai and Dan Hall.

Space Shuttle Endeavour to deliver Expedition Six to ISS

Launch of STS-113, scheduled Nov. 18, will be the fifth International Space Station (ISS) crew rotation flight by a Space Shuttle.

Expedition Six Commander Ken Bowersox and Flight Engineers Don Pettit and Nikolai Budarin will travel aboard Space Shuttle Endeavour to the station to replace the Expedition Five crew.

Expedition Six crew members will have a four-month tour of duty on the orbital outpost. They are scheduled to return to Earth with STS-114 in March 2003.

The Expedition Five crew — Commander Valery Korzun, Flight Engineer Sergei Treschev and NASA ISS Science Officer Peggy Whitson — will wrap up a stay that spanned more than five months when Endeavour departs the station.

Expansion of the ISS will continue when

STS-113 delivers its primary payload, the P-1 (P-One) Truss.

Following the P-1's attachment to the port side of the S-0 (S-Zero) Truss, STS-113 Mission Specialists Michael Lopez-Alegria and John Herrington, NASA's first Native American astronaut who is a tribal member, will perform three spacewalks to outfit and activate it. The P-1 installation and activation activities will be similar to those of the S-1 (S-One) Truss during STS-112.

In addition to the P-1, STS-113 will deliver supplies and equipment to the station.



Through a series of town meetings, NASA's Freedom to Manage (F2M) Task Force is visiting each center to help identify barriers to NASA's performance. Participating in the Stennis Town Meeting on Oct. 25 were, from left, Olga Dominguez, director, NASA's Environmental Management Division, NASA Headquarters, Washington, D.C.; Greg Hayes, director, Human Resources, Johnson Space Center, Houston; Stennis Space Center Director Bill Parsons; F2M Chairman Courtney Stadd, NASA's chief of staff and White House liaison, NASA Headquarters; Rich Beck, director, Resource Analysis Division, Office of the Chief Financial Officer, NASA Headquarters; Anne Guenther, director, Analysis Division, NASA Headquarters Office of Procurement; and Jeff Sutton, assistant administrator, NASA Headquarters Management Systems.



NASA astronaut John Herrington, center, visits with students in the Choctaw Tribal School System. Herrington, a Chickasaw, is NASA's first Native American astronaut who is a tribal member. He is slated to fly aboard STS-113 this month.

Choctaw partnership marks start of successful ventures at Stennis

NASA's Stennis Space Center enjoys a unique relationship with the Mississippi Band of Choctaw Indians. A Space Act Agreement signed in 1995 sealed the partnership between the Choctaw tribe and Stennis, marking the beginning of many successful ventures.

NASA's Office of Education at Stennis plays an integral role in the relationship between the center and the Choctaw tribe. "Chief Martin and the Mississippi Band of Choctaw Indians are committed to education," said NASA's Nancy Sullivan, Office of Education at Stennis. "Because of the chief's

leadership and the economic success of the tribe, they are role models for other Native Americans across the nation. NASA has partnered with the Mississippi Band of Choctaw Indians Tribal School System, and they, in turn, are mentoring other school systems throughout the nation."

The Office of Education works with the Choctaw tribe to enhance existing educational programs and develop new ones. To enhance curriculum for teachers and classroom experiences for students, Stennis

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Powe named to lead Earth science at Stennis

NASA's Dr. David Powe has been named director of the Earth Science Applications (ESA) Directorate at Stennis Space Center.



Dr. David Powe

Powe joined NASA in 1992 following tenure as president of Mississippi Delta Community College. He previously served as superintendent of the McComb Public Schools.

From 1992 to 1997, Powe was program manager for NASA's national systemic education demonstration model, the Tri-State Education Initiative, located in Iuka. In late 1997, Powe moved to the Mississippi Gulf Coast to become manager of the Stennis Office of Education.

Education programs led by Powe have been recognized six times by the National Performance Review Office with the Hammer Award.

Stennis empl



Astronaut Paolo Nespoli, European Space Agency, left, Lockheed Martin Space Operations' Le Craft and NASA astronaut Kevin For



Astronaut Paolo Nespoli, European Space Agency, left, Lockheed Martin Space Operations' Alan Mayne and NASA astronaut Kevin

Eleven Stennis employees were honored Oct. 23 with the astronaut corps' own personal achievement award, the Silver Snoopy Award.

The Silver Snoopy Award recognizes individuals for professional dedication and outstanding support that greatly enhance flight safety and mission success in the Space Shuttle program.

Among the recipients were NASA's



Stennis Office of Human Resources honored NASA employees hired between Oct. 1, 2001, and Sept. 30, 2002, with a reception Nov. 5 in the Atrium of Bldg. 1100. Stennis Center Director Bill Parsons, center, back row, also welcomed the new employees, who included, from left, Susan Cleaves, Jean Rhodes, Sherman Wilson, Justin Junell, Beth Bradley, John Pace, Rebecca Strecker, Thomas Jacks, Alan Mather, Cynthia Bright, JoAnn Molizon, Sallie Bilbo, Parsons, Monica Moore, Timi Vann, Jared Congiardo, Cynthia Aubin, Roger Lee, Scott Jensen, Troy Frisbie, Callie Hall and Robert Poncet. NASA employees honored but not pictured include Tammy Bowen, Cheryl Cuevas, Sandra Mitchell, Synthia Hill and Sandra Wozniak.

oyees receive coveted 2002 Silver Snoopy Awards



NASA astronaut Kevin Ford, left, NASA's Lanee Cooksey and astronaut Paolo Nespoli, European Space Agency



Astronaut Paolo Nespoli, European Space Agency, left, NASA's Ann Sharpe and NASA astronaut Kevin Ford



NASA astronaut Kevin Ford, left, The Boeing Company's Sandra Breit, and astronaut Paolo Nespoli, European Space Agency



agency, Leonard and NASA astronaut Kevin Ford, left, The Boeing Company's Kenny Dubuisson and astronaut Paolo Nespoli, European Space Agency



NASA astronaut Kevin Ford, left, The Boeing Company's Harlon 'Sonny' Jarrell and astronaut Paolo Nespoli, European Space Agency



Astronaut Paolo Nespoli, European Space Agency, left, Mississippi Space Services' Todd Mannion and NASA astronaut Kevin Ford



space operations' and NASA astronaut Kevin Ford, left, Lockheed Martin Space Operations' Deborah Murphy and NASA astronaut Kevin Ford



Astronaut Paolo Nespoli, European Space Agency, left, Lockheed Martin Space Operations' Deborah Murphy and NASA astronaut Kevin Ford



Astronaut Paolo Nespoli, European Space Agency, left, Lockheed Martin Space Operations' Frances Songy and NASA astronaut Kevin Ford

Other recipients included The Boeing Company's Sandra Breit, Kenny Dubuisson and Harlon "Sonny" Jarrell; Mississippi Space Services' Todd Mannion and Mark Mills; Lockheed Martin Space Operations' Leonard Craft, Alan Mayne, Deborah Murphy and Frances Songy. Astronauts Paolo Nespoli, European

Space Agency, and NASA's Kevin Ford were on hand to present the awards. Of all the Space Flight Awareness Awards, the Silver Snoopy best symbolizes the intent and spirit of Space Flight Awareness. An astronaut always presents the Silver Snoopy because it is the astronauts' own award for outstanding performance, contributing to flight safety and mission suc-

cess. In fact, fewer than 1 percent of the space program workforce receive it annually. The award is a sterling silver Snoopy lapel pin that has flown on a Space Shuttle mission, plus a certificate of appreciation and commendation letter for the employee, both signed by the astronaut. The Silver Snoopy Awards program began 33 years ago.

NASA's Karen Vander rises to challenges

Growing up, NASA engineer Karen Vander did well in math. She was encouraged by a high school counselor in her hometown of Baton Rouge, La., to take part in the Southern University Engineering Summer Institute. After that, the only question remaining was what kind of engineer she was going to be.

"I first thought I would be a civil engineer or maybe a petroleum engineer, but I felt they both would be too restrictive. I wanted to be sure I had a broader base, which led me to become a mechanical engineer. Overall, I found it offered me the greatest flexibility."

Vander was introduced to Stennis Space Center in 1991

through NASA's cooperative education program. With years of cooperative experience and a degree from the University of New Orleans, in 1995 she went to work in the A-Complex at Stennis in support of the Space Shuttle Main Engine Program as a mechanical experimental equipment engineer.

Vander said initially it was hard being a new NASA engineer, also being a woman engineer, out on the test stands. NASA staff had not traditionally occupied office space in the test stands, and their presence raised concern among contractors.

"I thought getting accepted was going to be harder than it actually was," she said. "But you know, everyone has a passion for what

they do, and given time, we all learned we had something to learn from one another. It didn't matter who, what, where or for whom we worked."

After working as a test operations engineer on projects such as the 250K-hybrid rocket motor and the TRW 650K-engine test programs, Vander came in from the stands in October 2000 to work in the Propulsion Test Program Office. In addition to her engineering duties, she also serves as executive secretary for the Rocket Propulsion Test Management Board (RPTMB), NASA's decision-making body for the Agency's rocket propulsion testing program.

Vander provides the daily coordi-



NASA's Karen Vander

dination of the board composed of NASA staff members from Stennis; White Sands Test Facility,

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The loss is particularly worrisome because southern Louisiana is home to 40 percent of the coastal wetlands in the 48 contiguous states. Beyond their natural functions as water purifiers, these marshes and estuaries are vital to the local fishing and tourism industries, and they provide a buffer against flooding by storm surges during hurricanes.

For example, during the recent one-two punch of Tropical Storm Isidore and the following week's Hurricane Lili, Comardelle said, "People who've been living there 20 or 30 years have never seen storm surges come up that high."

To counter this loss of wetlands, the Army Corps of Engineers is spearheading an ambitious restoration project called Coast 2050. The project will extend 50 years to try to restore 20,000 square miles of wetlands. Because the project will require detailed measurements of the landscape for planning, the Army Corps of Engineers is recruiting data from NASA satellites to help.

Dr. Marco Giardino, acting chief of the Applications Engineering Division for the Earth Science Applications Directorate at Stennis, is helping coordinate



NASA's involvement in Coast 2050.

"These swamps and marshes are often very dense and hard to get around in, which makes them difficult to survey," he said. "By using satellite imagery from NASA's fleet of Earth science sensors, we can supplement traditional surveying techniques and improve decision-making."

The first target will be the hundreds of ancient Native American sites scattered throughout the bayou. Most of these are visible only as wide mounds rising just a few feet in elevation.

How can a satellite in orbit spot a subtle mound in a vast swamp?

Satellites distinguish changes in vegetation that can be impor-

Clockwise, from left, a Native American temple mound, as photographed in the 1980s, has since been reduced by development and shoreline erosion.

A camp house and surrounding trees near a Native American mound sink into the Louisiana marsh.

NASA's Dr. Marco Giardino, left, interprets satellite imagery on the way to an archaeological site near Lake Salvador, La.

tant clues about the wetland characteristics — sunlight reflecting off a patch of swamp carries the fingerprints of the area's plant life in its bands of colors, for instance. A patch of oaks will have a different color fingerprint from that of a patch of reeds or grasses.

So by looking at the reflected

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NASA’s Dr. Richard Miller, chief scientist of the Earth Science Applications Directorate at Stennis Space Center, discusses the program’s exhibit at the OCEANS 2002 conference with DeNeice Guest, a senior remote sensing scientist with Lockheed Martin Space Operations, also at Stennis. The conference, co-sponsored each fall by the Marine Technology Society and the Institute of Electrical and Electronics Engineers, is the largest assembly of oceanographers in the world. This year’s conference, Marine Frontiers: Reflections of the Past, Visions of the Future, was held Oct. 29-31 in Biloxi.

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light, the satellites that will be used — NASA’s Terra, EO-1 and Landsat 7 satellites — can map out the raised areas in a large bayou or swamp, and thus identify candidates for archeological sites. “The use of satellites will make it possible for archeologists to pinpoint areas to look at on the ground without having to first

undertake extensive terrestrial surveys,” said Dave Davis, an archeologist at Tulane University and a consultant for Coast 2050. Coast 2050 hopes to preserve the habitat for thousands of species and restore the buffer between gulf storm surges and inland cities. They will also help save the bayou that Cajuns like Comardelle call home, and preserve the relics of Native Americans who called it home ages ago.

VANDER. . .

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Las Cruces, N.M.; Marshall Space Flight Center, Huntsville, Ala.; and Glenn Research Center - Plum Brook Station, Sandusky, Ohio. Vander says the RPTMB is proof positive that NASA Administrator Sean O’Keefe’s “One NASA” concept will work. “The management board is the ‘One NASA’ concept,” she said. “The board works openly in an atmosphere of trust. Everyone has a say, but the goal is to find the best match of assets for a test program.” NASA’s Mike Dawson, who chairs the board, was glad to see Vander join the RPTMB staff.

“Karen not only oversees the board’s activities,” said Dawson, manager of the Propulsion Test Program Office at Stennis. “She is currently leading the development efforts of a system to accurately and efficiently track high-valued rocket propulsion test components to be used in new propulsion system designs and existing propulsion facilities throughout NASA and the Department of Defense. Karen has risen to meet every challenge we have put in front of her.” Vander is a past member of the NASA Federal Women’s Program Advisory Council and a past member of the Stennis Space Center Association of Cultural Awareness. She and her husband, Maury, also a NASA engineer, live in Slidell, La.

PREBURNER. . .

(Continued from Page 1)

engine system developed by the Boeing Rocketdyne Propulsion and Power Unit of The Boeing Company, Canoga Park, Calif. Taking lessons learned from the first-generation reusable launch engine — the Space Shuttle Main Engine (SSME) — which is also manufactured by Boeing Rocketdyne, the life cycle of the RS-83 engine is expected to surpass that of the SSME. Other RS-83 design features include turbopumps with easy access. The RS-83 design also taps into state-of-the-art fabrication techniques, including components made through the technology of powder metallurgy. Stennis’ E-Complex is the nation’s largest test facility of its kind and serves as a developmen-



Technicians lift the RS-83 preburner to the test stand. tal rocket engine component test facility for future generation rocket engines.

PARTNERSHIP. . .

(Continued from Page 4)

aerospace education specialists conduct workshops for teachers in the tribal school system and train teachers to use the Global Learning and Observations About the Environment Program. The Stennis Office of Education was successful in establishing a NASA Educator Resource Center and an interactive classroom, which connects to the Mississippi Educational Television interactive video network. Stennis also sponsored a Choctaw team in the For Inspiration and Recognition of Science and Technology (FIRST) Robotics competition. The team was honored with a prestigious award at a 2000 regional competition and is the only Native American team to compete in the FIRST program.

Other joint achievements include mapping the Trail of Tears — the course traveled over a three-year period beginning in November 1831 by the Choctaws in their relocation from Mississippi to what is now southern Oklahoma — and providing technology assistance through the Computers to Schools program. NASA and the Office of



Students at the Bogue Homa community of the Mississippi Band of Choctaw Indians work on computers donated by Stennis Space Center. The computers were placed in the Bogue Homa community center. Education at Stennis continue to develop new partnerships to ensure educational success. “This relationship benefits NASA greatly in broadening our education and outreach efforts in Native American communities,” Sullivan said.

SAFETY CORNER

Proper use of seat belts saves countless lives each year

Seat belts, introduced in 1959, are today an accepted part of routine vehicle operation for millions of drivers and passengers. Unfortunately, millions of other vehicle occupants continue to put their lives at risk by ignoring these critical restraint systems.

As with any safety system, seat belt performance is dependent on proper use and fit. If the belt is not positioned correctly on the vehicle occupant's body, it can fail to provide adequate safety in the event of a collision or rapid deceleration.

The following are tips to ensure your belts provide the maximum safety you and your passengers deserve:

- Always wear your seat belt and insist your passengers do the same.
- Seat belts help prevent internal injuries by spreading the force of a collision across two of the human body's strongest areas — the pelvis and upper chest. To ensure the proper distribution of force, the lap belt should be positioned as low on the hips as possible and the diagonal belt across the chest.
- Never slip the diagonal belt behind your body; the lap belt alone cannot prevent you from being thrown forward and out of the vehicle.
- Make sure your belt fits snugly against your body; if it is too loose, you could be injured by being thrown against the belt itself.
- If your vehicle is fitted with only lap belts (pre-1974 models), contact a dealership for an upgrade to a three-point harness. Aftermarket kits are available for many vehicle makes and models.

Facts:

- Three of five people killed in vehicle accidents would have survived their injuries had they been wearing their seat belts.
- Seat belts save an estimated 9,500 lives in the United States each year.
- Every 13 minutes, someone is killed in a traffic accident.

QUICKLOOK

■ **The following will be closed Thursday, Nov. 28, in observance of Thanksgiving and Wednesday, Dec. 25, in observance of Christmas:** Keesler Federal Credit Union; Stennis Child Care Development Center; APG Service Station; Dave's Snack Bar; main cafeteria; U.S. Post Office; World Wide Travel; Hancock Bank; The Wellness Center; Corporate Cleaners; MSS-InDyne mail and taxi services; the barber shop; and communications. World Wide Travel, the barber shop and Corporate Cleaners will remain closed Friday, Nov. 29. The barber shop and Corporate Cleaners will remain closed Thursday and Friday, Dec. 26-27.

■ **NASA and the Stennis Environmental Working Group encourage** participation in The Gulf Regional Planning Commission's online survey designed to provide data to assess and implement alternative transportation opportunities such as carpooling and expanded transit options. Participation in the survey will provide transportation planners with valuable information regarding commuter patterns on the Gulf Coast. Access the survey at www.grpc.net/rides_hare.htm. For more information, call Carolyn Kennedy at ext. 8-1445.

■ **Give the gift of life this season** at the Stennis Space Center Holiday Blood Drive from 9 a.m. to 3 p.m. each day, Dec. 4 and 5, in the Conference Center, Bldg. 1100. For information, contact Sheila Wilson at ext. 8-1815.

■ **Volunteers for the annual Gulf Coast Marathon** are needed for Nov. 30. To volunteer, call the Wellness Center at ext. 8-3950.

■ **School age care for children** — kindergarten through 12-years of age — will be available through the Stennis Child Development Center Dec. 20- Jan. 6. Deadline for registration is Dec. 6. Check www.edu.ssc.nasa.gov/scdc or call ext. 8-3224 for more information.

TEST . . .

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our house in the country 10 years ago, so we wanted to see what it was all about," said Smith.

The public engine test marked the fourth time visitors have been invited to watch an SSME test, and was the first time a test was shown live to a worldwide audience on the Internet.

Stennis joined with the Science @ NASA Web site hosted by Marshall Space Flight Center, Huntsville, Ala., to provide live streaming-video via the Internet.

Stennis Space Center is NASA's proving ground for all Space Shuttle Main Engines and plays an integral role in testing component and propulsion systems for the future.

IFMP. . .

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aimed at putting the NASA centers and Headquarters on the same page when it comes to managing and reporting budgets, is designed to re-establish management credibility with the administration, Office of Management and Budget and Congress, and should help refocus the nation's attention on NASA's scientific and technical agenda.

The module is at the heart of the financial, business and procurement processes, and will allow NASA to standardize and share information directly across the Agency.

LAGNIAPPE

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